DEPARTMENT OF BUILDING

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CONSTRUCTION OF GROUND FLOOR SLAB

Prepared by:

ALIF IMRAN BIN IBRAHIM

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ABSTRACT

This report briefly explains about the material and machineries needed, the method of construction of ground slab, and also the problem and solution for the construction of ground floor slab. This report is an outcome from a week while constructing the ground floor slab. The objectives for this report are to determine the material used for construct ground floor slab and machineries needed, explain the method of construct the ground floor slab, and to investigate the problem occurred and solutions to solve the problem. The machinery involve is vibrator machine, crane, plate compacter, backhoe and the tools used are hammer, steel cutter, hoe, and long wood trowel. For the method to construct ground floor slab, there are seven (7) method which are formwork installation, compact crusher run, piping work, lay BRC and DPM, marking level of slab, pouring the concrete and dismantle formwork the last objective in this report is the problem occurred during the works and the solution strategy to solve the problem are already determined. To complete this report, there are three (3) research method which are observation, interview and document review. Observation have been made while the worker is doing his job. Then, the interview method is held by asking the workers and supervisor with random question spontaneously. While for the document review, several documents such as bills of quantities and site drawings have been reviewed. In conclusion, the exposure for the practical student during internship period are important because students can experience working and can increase knowledge in the construction.

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CHAPTER 1.0: INTRODUCTION

A ground floor slab is one of the preliminary work in construction of type of building after construct foundation and stump(shawkat,2017). A concrete slab is a common structural element of modern buildings consisting of a flat, horizontal surface made of cast concrete (Garber,2006). Ground floor slab is an important role for a building because the floor is something that will be used by humans where a human will stand on the floor and do daily routine on that floor(shawkat,2017). The floor should have a flat and solid surface as the floor will carry the loads of that one floor such as live load and dead load (Nicholas Okai,2017). Floor construction should be done properly and in accordance with standard procedures to ensure that water does not reach the surface or absorb and damage it. This situation can be quite dangerous if the floor also works to accommodate dead loads such as furniture and it could endanger the occupants safety.

As for choosing and construct ground floor slab, important aspect that should be consider are type of structure, climate at the building site and soil properties of the ground which the slab is to be supported. The floor selection will be done by the engineer after doing the calculation of the surrounding conditions such as the soil condition and the load that the floor will accommodate.

There are two type of ground floor slab, suspended slab and non-suspended slab. Suspended slab is slab was construct under the ground level which is the slab not directly contact with earth, there are commonly used suspended slab to create floor for upper storeys of houses. For non-suspended slab, the slab are cast on the ground which connecting with the stump, so the load will go through to the foundation. The advantages of non-suspended slab is can be construct in short term and the durability is high.

There are many types of slab, however, the aim of this is to discover the construction of ground floor slab at Permatang Badak Maju 3, Kuantan, Pahang, The ground floor slab must be suitable with the site condition to ensure the slab will not have a problem.